

Helicopter Hopper



PERSONA STATEMENT

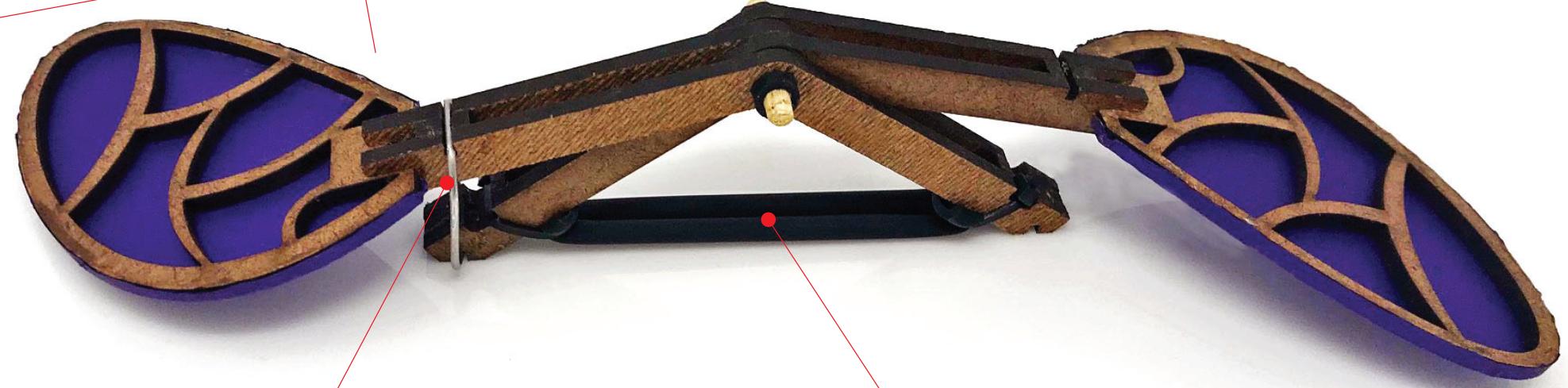
Search and Rescue Sara is a helicopter pilot for a search and rescue team in Yosemite National Park, she is looking for better ways for the ground crew to communicate with her in the helicopter.

DESIGN GOAL

Build a hopper to alert helicopter of ground crew's position.

WINGS

The maple seed inspired wings will allow the hopper to spin and slow it's fall on it's path to the ground.



TRIGGER

Fishing line holds hopper open in tension, then is cut using a rocket igniter for an immediate release of the stored elastic energy in the stretched rubber tubing.

STORED ENERGY

Rubber tubing is stretched and held by zip-ties to store elastic energy in the hopper.

